

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A system for placing a vascular implant (10) comprising:

- a vessel dilation device (1) with an outer envelope (2) and a tapered end piece for introduction into a vessel, whereby said end piece consists of a nose (14) formed at the distal extremity of the outer envelope (2) and the dilation device (1) comprises means for opening the nose (14), consisting of at least two longitudinal slots (16a, 16b, 16c, 16d) which divide the nose (14) into several segments (15a, 15b, 15c, 15d) which can be opened out in order to open the nose (14);

- an implant (10) which is placed in the outer envelope (2), wherein the implant (10) includes a first auto-expandable element (24) which expands in a radial direction and is only maintained by the internal wall of the outer envelope (2), a second ~~hollow~~ auto-expandable element (25) which expands in a radial direction, and a hollow intermediate section (26) which deforms by twisting and is located between the first and second auto-expandable elements ~~that is deformable by twisting~~ such that the implant does not consist of auto-expandable elements which expand in a radial direction, and the first auto-expandable element (24) is positioned in the outer envelope at a location

closer to the nose (14) in the distal direction than the second auto-expandable element (25);

- a means for translation of said implant (10) in relation to the outer envelope (2) such that the first auto-expandable element (24) is maintained by the internal wall of the outer envelope (2), and upon movement of said implant (10) distally out of the nose (14), the first auto-expandable element (24) presses against the internal wall nose (14) to open out the segments (15a, 15b, 15c, 15d);

- the means of translation including an inner sheath (3) having an internal wall for maintaining a portion of the implant (10), the inner sheath (3) being able to slide along and rotate within the internal wall of the outer envelope (2) and being able to push the portion of the implant (10) maintained by the internal wall of the inner sheath (3) so that the implant (10) moves in a distal direction toward the nose (14), and the inner sheath (3) being able to rotate within the outer envelope (2);

- the second auto-expandable element (25) being configured to be only maintained by the internal wall of the inner sheath (3) such that the portion of the implant (10) maintained by the internal wall of the inner sheath (3) includes the second auto-expandable element (25);

- the hollow intermediate section (26) being deformable by twisting upon rotation of the inner sheath; and

- a plunger (4) having a distal end, the plunger (4) being positioned so that the implant (10) is between the distal end of the plunger (4) and the nose (14), the plunger (4) being mounted in such a way as to be slidable in the inner sheath (3) and so that the distal end of the plunger is able to press against the second auto-expandable element (25) to release the portion of the implant (10) maintained by the internal wall of the inner sheath (3) at an end of the second auto-expandable element (25) furthest from the intermediate section.

2-3. (cancelled)

4. (previously presented) The system according to Claim 1, further comprising:

- a grip (6) that is an integral part of the outer envelope (2).

5. (previously presented) The system according to Claim 4, further comprising:

- a grip (7) that is an integral part of the inner sheath (3), wherein movement of the grip (7) causes the inner sheath (3) to slide within the outer envelope (2).

6. (previously presented) The system according to Claim 5 in characterised in that:

- the grip (7) on the inner sheath is located behind the grip (6) on the outer envelope (2) and includes a removable spacer (8) situated between said grips (6, 7) to maintain the space between said grips.

7. (previously presented) The system according to Claim 1 characterised in that:

- the segments that can be deployed (15a, 15b, 15c, 15d) are joined as required along the slots (16a, 16b, 16c, 16d) when the nose (14) is closed.

8. (previously presented) The system according to Claim 7 characterised in that:

- the nose (14) includes a temporary connector (17) by slot (16a, 16b, 16c, 16d) between the segments (15a, 15b, 15c, 15d).

9. (previously presented) The system according to Claim 1 characterised in that:

- the nose (14) includes a central residual passage (18).

10. (previously presented) The system according to Claim 1 characterised in that:

- the nose (14) includes a shape memory so that the nose (14) is closed as a default position when the means of opening are inactive.

11. (cancelled)

12. (previously presented) The system according to Claim 1, further comprising:

- a grip (12) that is an integral part of the plunger (4) located behind the grip (7) that is an integral part of the inner sheath (3), wherein movement of the grip (7) causes the inner sheath (3) to slide within the outer envelope (2), and it also includes a removable spacer (9) placed between said grips (7, 12) to maintain them apart.

13. (previously presented) The system according to Claim 1, further comprising:

- means of adjusting (19, 20) the angle of the inner sheath (3).

14. (previously presented) The system according to Claim 1, further comprising:

- a central channel (27) along the line of the outer envelope (2) to allow a guide wire to be passed through.

15. (previously presented) The system according to Claim 1, further comprising:

- a grip (6) that is an integral part of the outer envelope (2).

16. (previously presented) The system according to Claim 1, further comprising:

- a grip (7) that is an integral part of the inner sheath (3), wherein movement of the grip (7) causes the inner sheath (3) to slide within the outer envelope (2).

17. (cancelled)

18. (new) A system for placing a vascular implant (10) comprising:

- a vessel dilation device (1) with an outer envelope (2) and a tapered end piece for introduction into a vessel, whereby said end piece consists of a nose (14) formed at the distal extremity of the outer envelope (2) and the dilation device (1) comprises means for opening the nose (14), consisting of at least two longitudinal slots (16a, 16b, 16c, 16d) which divide the nose (14) into several segments (15a, 15b, 15c, 15d) which can be opened out in order to open the nose (14);

- an implant (10) which is placed in the outer envelope (2), wherein the implant (10) includes a first auto-expandable

element (24) which expands in a radial direction and is only maintained by the internal wall of the outer envelope (2), a second auto-expandable element (25) which expands in a radial direction, and a hollow intermediate section (26) which deforms by twisting and is located between the first and second auto-expandable elements such that the implant does not consist of auto-expandable elements which expand in a radial direction, and the first auto-expandable element (24) is positioned in the outer envelope at a location closer to the nose (14) in the distal direction than the second auto-expandable element (25);

- a means for translation of said implant (10) in relation to the outer envelope (2) such that the first auto-expandable element (24) is maintained by the internal wall of the outer envelope (2), and upon movement of said implant (10) distally out of the nose (14), the auto-expandable element (24) presses against the internal wall nose (14) to open out the segments (15a, 15b, 15c, 15d);

- the means of translation including an inner sheath (3) having an internal wall for maintaining a portion of the implant (10), the inner sheath (3) being able to slide along and rotate within the internal wall of the outer envelope (2) and being able to push the portion of the implant (10) maintained by the internal wall of the inner sheath (3) so that the implant (10) moves in a distal direction toward the nose (14);

- the second auto-expandable element (25) being configured to be only maintained by the internal wall of the inner sheath (3) such that the portion of the implant (10) maintained by the internal wall of the inner sheath (3) includes the second auto-expandable element (25); and

- the hollow intermediate section (26) being deformable by twisting upon rotation of the inner sheath (3).